

MILK RIVER WATERSHED NEWS

Your Future Depends On This Pipe

By John Tubbs, DNRC

Back from a recent inspection of the repair of the St. Mary's Siphon, it really hit home. The entire Milk River watershed in Montana is dependant on two pipes that are nearly 100 years old and are in a failed condition. This summer ninety-seven percent of all the water that flowed in the Milk River originated in a separate river basin fed by the snow pack of Glacier National Park. That's right, the Milk River watershed only produced three percent of the flow this summer.

The Siphons shown in the picture on page 2 are twin 90 inch barrels that carry diverted water across the St. Mary's River and eventually into the North Fork of the Milk River. DNRC funded a grant to repair a portion of these siphons in 1999. A second grant was just issued for further repairs. The good news for the Milk is that this aging system that our great grandfathers built still works; but, for how long?

As a grant and loan manager for the Department of Natural Resources and Conservation (DNRC), I review hundreds of grant propos-

(Continued on Page 2)

The 2001 Water Year - A Year to Remember

By Mike Dailey, DNRC

Folks in the Milk River basin went into this irrigation season with roughly 50 percent of normal storage, 70 percent of normal snowpack, and already dry conditions. The water supply situation only got worse as the initial forecasted irrigation allotment of 0.9 acre-

feet per acre (ac-ft/ac) was reduced to 0.4 ac-ft/ac, but then raised to 0.6 ac-ft/ac.

What did this mean for the Milk River irrigators? It meant a lot of acres went without water, especially in the upper two-thirds of the basin. According to Hugh

(Continued on Page 3)

INSIDE

This Issue

Your Future Depends on This Pipe

By John Tubbs
Page 1

The 2001 Water Year - A Year to Remember

By Mike Dailey
Page 1

Upcoming Events

Page 2

Meet Jim Thompson

By Mike Dailey
Page 4

Coordinator's Corner

By Jim Thompson
Page 4

Alfalfa Irrigation District

Page 5



Happy Holidays

Representatives on the Milk River JBC include the following:

Kay Blatter
Hugh Brookie
Melvin Novak
Lee Cornwell
Jack Gist

Chairman
Vice-Chairman
Secretary
Member
Member

Fort Belknap Irr. Dist.
Malta Irr. Dist.
Glasgow Irr. Dist.
Glasgow Irr. Dist.
Alfalfa Valley Irr. Dist.

Casey Kienenberger
Ralph Snider
Bruce Anderson
Brad Tillemann
Steve Tremblay

Member
Member
Member
Member
Member

Malta Irr. Dist.
Harlem Irr. Dist.
Paradise Valley Irr. Dist.
Zurich Irr. Dist.
Dodson Irr. Dist.

als each year. As a result I am aware of projects throughout the state. Milk River irrigation districts and municipalities have submitted a number of grant and loan applications to DNRC. Some of these projects represent significant investments in the infrastructure needed to beneficially use available water.

Even with the investment that local irrigation districts, municipalities, and state agencies have made, the big project is still on the horizon.

Milk River water users need to ask the question: Can our economy survive if we allow the 100-year-old infrastructure that delivers our water to simply fall apart? No action is a choice. In the case of the Milk River, it has serious consequences – no water.

It will take the partnership of all water users in the basin, municipal, tribal, and irrigation districts to raise the capital necessary to rehabilitate the aging structures that deliver water to the Milk River valley. Irrigation districts must team up with municipalities and tribal governments to take control of their destinies.

The partnership must also include the state and federal governments. Without significant federal grants and state grants, local governments will never be able to afford the repairs.

When it comes to state grants, no existing program has the resources to address the needs of the Milk River. A new funding mechanism must be established to develop an investment fund.

As far as the Bureau of Reclamation is con-



Twin Syphon Barrels that carry St. Mary's water to the Milk River.

cerned, Milk River water users need to thank them for keeping the water flowing. From my inspection of the projects we are working on, it is amazing that a few federal employees are able to keep the wheels from falling off. The Milk River system is huge and complex. I know that people just can't grasp what they do. I really had no idea until I inspected the system first hand.

On the other hand, the Bureau can be faulted when it comes to the status of the infrastructure itself. For many reasons, the Bureau has not mustered the resources necessary to begin to address the aging infrastructure of the Milk River system. In government, we call this deferred maintenance. The Bureau is conducting studies now, however, the focus is on the settlement of the Fort Belknap Water Right.

It's time for local water users to get active, to take this project on as your own. With local, grassroots support, state agencies will work with you to seek both federal and state funds to engineer solutions and to replace and repair aging infrastructure.

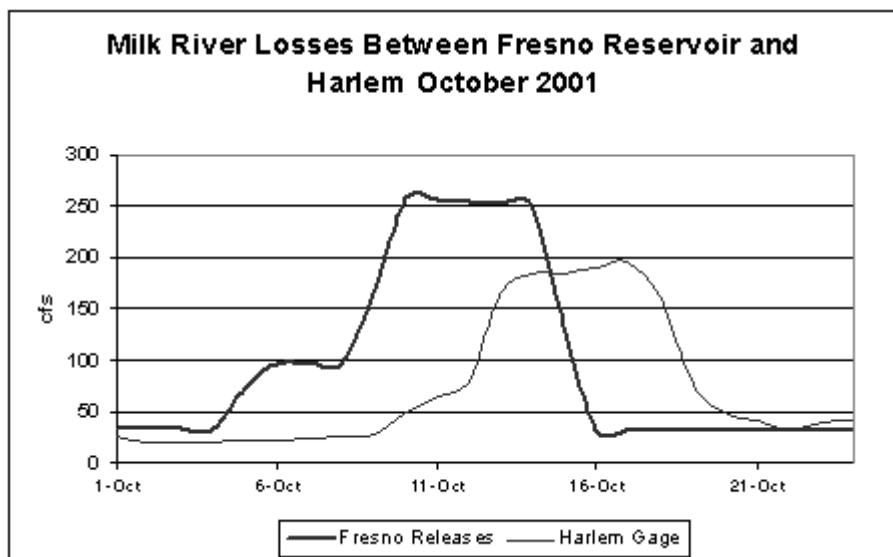
The beginnings are in place. The irrigation districts have formed a Joint Board of Control. This organization will allow the districts to act in a coordinated fashion. The Milk River Alliance represents water users and other stakeholders. This organization will be critical to addressing the issues.

This issue is not just an irrigation problem. The entire economy of the Milk River is at stake. From the irrigation field to the city, sportsman and cattleman, tribal and non-tribal, everyone needs water. ✓

Upcoming Events

2002 Water Management Workshop
February 4-8, 2002
Denver, CO
Limited Scholarships Available
Call Brent Esplin, USBR for details
(406) 247-7489

Montana Water Resource Association
Annual Meeting
Fairmont Hot Springs
January 29 & 30, 2002
Call Mike Murphy for details



Brookie, President of Malta Irrigation District, where only 1/3rd of the fields in his district got irrigated, “We didn’t have spring rain to make it easier— it killed us.”

Delivering water to Malta Irrigation District was a challenge. Not enough of the water released from Fresno Reservoir reached the Dodson Diversion Dam for effective irrigation. Scott Guenthner, with the U.S. Bureau of Reclamation noted, “we were in an impossible situation, there simply was not enough water.”

During peak summer releases from Fresno Reservoir, approximately 300 cfs or 25 percent of the released storage could not be accounted for by the time it reached the Harlem Gaging Station. In October, the Bureau transferred 5,000 ac-ft from Fresno to Nelson Reservoir and measured the flows to determine where the water losses occurred. A peak discharge of 250 cfs was released from Fresno Reservoir. The peak flow at the USGS Harlem Gage

Station was only 195 cfs - a loss of 22 percent, which is similar to what we saw during the irrigation season (Please see graph). Peak flows at the Dodson South Canal diversion were about 140 cfs, or 56% of the flow released at Fresno. The losses were attributed to the flows entering into the shallow groundwater adjacent to the stream bank, and this is part of the reason deliveries to Malta were so difficult.

Despite the water management problems, last summer’s drought brought us some bright spots and taught us some important lessons. The Milk River Project Joint Board of Control worked well together in distributing the available water supplies. Also, luck of

the draw brought 10 ½ inches of rain to the Glasgow area during June and July, taking some of

(Continued on Page 6)



Hydrologic Technician Deb Pankratz measures flows near Malta on a chilly day in October during a storage transfer from Fresno Reservoir to Nelson Reservoir.

Milk River Reservoir Comparison
October 1, 2000 and October 1, 2001

Storage Facility	October 1, 2000	October 1, 2001
Sherburne Reservoir	5,975 acre-feet	5,142 acre-feet
Fresno Reservoir	33,460 acre-feet	20,674 acre-feet
Nelson Reservoir (active)	7,299 acre-feet	14,820 acre-feet

SOURCE: U.S. Bureau of Reclamation

MEET JIM THOMPSON

By Mike Dailey, DNRC

After interviewing a number of qualified candidates, the Milk River International Alliance (MRIA) hired Jim Thompson of Fort Peck as their new watershed coordinator.

Originally from Mandan, North Dakota, Jim received an associate of arts degree from Bismarck State College, and a B.S. degree from University of North Dakota in Biology. After serving two tours of duty as a Medical evacuation Pilot in the US Marine Corp, Jim returned to school to earn an M.S. degree in Natural Resource Management from North Dakota State University. In 1981 he went into business for himself, establishing the first environmental consulting firm in Bismarck. Over the last 20 years, he has worked with numerous federal, state, county, and private landowners to resolve natural resource management issues.

His experience in projects

related to natural resource management include project manager for the development of North Dakota's 208 Water Quality Plan, and project management in the development of the state's Devils Lake Basin Plan. According to Jim, in 1994 he was looking for the best place to live in Montana and found a home in Fort Peck.

The MRIA is fortunate to have found such an experienced and capable watershed coordinator in Jim. Over the next two years, his primary responsibility will be to oversee completion of the MRIA's Milk River Watershed Assessment Project. Jim will attempt to visit with each of the conservation districts and irrigation districts in the basin this fall or

early winter. Jim can be reached at (406) 367-5405 or by email at bkrath@nemontel.net. Please say hello to Jim if you see him in the basin. ✓

Coordinator's

By Jim Thompson

Well, after working two weeks as the Milk River International Alliance Coordinator, I feel I need one of those hats that have four bills and says on the front "Which way am I going?" One quickly realizes there are a number of significant issues within the basin and there are an increasing number of demands being placed on the Milk River. Throw in the weather and my goodness!

I would suppose some out there are wondering just where am I going and what am I doing along the way. It is a simple proposition that the more pertinent information one has, the better chances one has of making good decisions; and there is a lot of good existing information out there. Simply put, most of my time will be spent getting that information to local decision-makers for their evaluation and recommendations. Throughout this process the Alliance has emphasized two guidelines, "think watershed" and "think local management". I look forward to meeting and working with many of you



Corner

and hope and trust this process will assist in addressing basin issues.

A friend of mine told me a story awhile back.

It seems that due to the dry weather the only water on his farm was a small puddle in the middle of his irrigation ditch. He had about thirty or so geese and they were raising heck trying to use that puddle.

If you don't hear from me in the near future you'll probably hear over the news that the body of Jim Thompson was found in a small puddle along the Milk. The drowning is a mystery but it was noted he had numerous goose tracks on his back.

Look forward to seeing all of you,

Jim

Alfalfa Irrigation District

General Information

Total Acres: 3,800
Number of Farms: 24
Water Price(s): \$13 per acre
Diversion: Lohman Dam
Miles of canals and laterals: 22

Board Members

President: Jack Gist
Member: Max Maddox
Member: Bruce Butcher

Number of employees
Part Time: 2 (Seasonal)

policy enforced?

A: The water user is required to turn off the diversion and has to reorder with a delay of 3 days.

Q: What recent improvements have been made to the district's system?

A: Ditch cleaning, ditch lining and increased water measurement.

Q: What is the single biggest factor that could improve irrigation in the basin?

A: A more adequate/reliable water supply.

Q: How do district members envision the basin 10 years from now?

A: More water measurement and accounting taking place. Much depends of future compacts and water settlements with Indian tribes.

Questions

Q: How does Alfalfa Valley ID charge water users?

A: Assessed with county real estate taxes through the Treasurer based on acres irrigated.

Q: What types of crops are grown within the district and approximate percentages for each crop?

A: 70% alfalfa hay and 30% grain.

Q: How does the district ensure a fair distribution of water?

A: The ditch rider measures water at turnouts.

Q: What is the district's policy when a user is observed wasting water and how is the



Alfalfa Valley Irrigation District Rider Dennis Kleinjan, left, and president Jack Gist discuss the merits of water measurement.

Did You Know....

Thousands of years ago, large glaciers pushed the Missouri River south, and now the Milk River occupies portions of that ancient Missouri River channel and valley.

If you have ideas for articles or news items,

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(2001 Water Year Continued from Page 3)

the pressure off of Nelson Reservoir.

This October, Milk River irrigators are entering the winter months with 6,090 acre-feet less stored water than last year, which bodes ominous for next year's irrigation season (see table on page 3). Perhaps, by applying some of the lessons we learned this year, we can lessen water shortfalls next summer. According to Guenther, "We learned some important lessons." When asked what should be done different next year if faced with a similar drought situation, he reflected, "We got held-up on starting flows into the St. Mary Canal. Next year, we need to get the Canal prepped and St. Mary water moving into the Milk River as early as possible. We also need to increase flow measurement for more accurate accounting." He went on to say "I liked the idea of the irrigation districts staggering their starts, but in hindsight, I would deliver both the first and second allotments of water to the lower districts for one continuous irrigation, rather than mak-



Nelson Reservoir at its peak storage during early May. The normal water level for this time of year is visible on the Nelson South Canal outlet structure.

ing a second smaller delivery later in the season. The split irrigation delivery was acceptable to the upper districts, but was impractical for providing water to the lower districts."

Dry years like this underscores the need for good water management. Several irrigation districts in the project are working toward improving their ability to manage available water supplies. Increased and improved water measurement is the first important step. Let's hope next year is more forgiving, but we need to remember the lessons we learned in 2001. ✓

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